

Docket No.: SAE-0023
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Hiroshi Sugiyama et al.

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: NOVEL HAIRPIN POLYAMIDE

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Submitted herewith on Form PTO-1449 or PTO/SB/08 is a listing of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR 1.56. Applicant respectfully requests that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form PTO-1449 or PTO/SB/08 be returned in accordance with MPEP §609.

- ☒ A copy of document BD and CB through CO are being submitted to comply with the provisions of 37 CFR §§1.97 and 1.98
- ☒ A copy of each listed document, documents BA through BC,, that was cited in the International Search Report or International Preliminary Examination Report attached hereto, should have been provided to the U.S. Patent and Trademark Office by the WIPO, and the provisions of 37 CFR §§1.97 and 1.98 should have been complied with.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* prior art reference against the claims of the present application.

Concise Explanation of Relevancy of the Document

(Fill out if no English translation, partial translation or English abstract is available)

- ☒ Any document having neither English translation nor English abstract relates to the subject matter of the above-identified application. English translation of the document is not readily available; however, the absence of such translations does not relieve the PTO from its duty to consider the submitted document (37 C.F.R. §1.98 and MPEP §609).
- ☒ 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date or within three months from the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in compliance with 37 C.F.R. §1.97(b), OR is being filed concurrent with filing of the Continued Prosecution Application (CPA) or the Request for Continued Examination (RCE). No fee is required (37 C.F.R. §1.97(b)).

Dated: September 8, 2004

Respectfully submitted,

By 

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Attorney for Applicant

Substitute for form 1449A/B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	Not Yet Assigned 10/507004
				Filing Date	Concurrently Herewith
				First Named Inventor	Hiroshi Sugiyama
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	BA	WO-01/085733-A1	11-15-2001	Japan Science And Technology Corporation		
	BB	WO-01/36677-A1	05-25-2001	Japan Science And Technology Corporation		
	BC	WO-00/15641-A1	03-23-2000	Japan Science And Technology Corporation		
	BD	JP-2000-281679-A	10-10-2000	Japan Science And Technology Corporation		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	International Search Report dated May 27, 2003	
	CB	Dervan, Peter B., "Molecular Recognition of DNA by Small Molecules," Bioorganic & Medicinal Chemistry, Vol. 9, Pages 2215-2235, Pergamon, Elsevier Science Ltd. (2001)	
	CC	Wemmer et al., "Targeting the Minor Groove of DNA," Nucleic Acids, Current Opinion in Structural Biology, Vol. 7, Pages 355-361, Current Biology Ltd. (1997)	
	CD	Turner et al., "Recognition of Seven Base Pair Sequences in the Minor Groove of DNA by Ten-Ring Pyrrole-Imidazole Polyamide Hairpins," J. Am. Chem. Soc., Vol. 119, Pages 7636-7644, American Chemical Society (1997)	
	CE	Trauger et al., "Recognition of 16 Base Pairs in the Minor Groove of DNA by a Pyrrole-Imidazole Polyamide Dimer," J. Am. Chem. Soc., Vol. 120, Pages 3534-3535, American Chemical Society (1998)	
	CF	Turner et al., "Aliphatic/Aromatic Amino Acid Pairings for Polyamide Recognition in the Minor Groove of DNA," J. Am. Chem. Soc., Vol. 120, Pages 6219-6226, American Chemical Society (1998)	
	CG	Gottesfeld et al., "Regulation of Gene Expression by Small Molecules," Letters to Nature, Vol. 387, Pages 202-205 (May 8, 1997)	
	CH	Dickinson, et al., "Inhibition of RNA Polymerase II Transcription in Human Cells by Synthetic DNA-binding ligands," Proc. Nat. Acad. of Sci. USA, Biochemistry, Vol. 95, Pages 12890-12895, National Academy of Sciences, (October 1998)	
	CI	Chang et al., "Strand Selective Cleavage of DNA by Diastereomers of Hairpin Polyamide-seco-CBI Conjugates," J. Am. Chem. Soc., Vol. 122, 4856-4864, American Chemical Society (2000)	
Examiner Signature			Date Considered

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
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				First Named Inventor	Hiroshi Sugiyama
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	SAE-0023

	CJ	Tao et al., "Rational Design of Sequence-Specific DNA Alkylating Agents Based on Duocarmycin A and Pyrrole-Imidazole Hairpin Polyamides," J. Am. Chem. Soc., Vol. 121, Pages 4961-4967, American Chemical Society (1999)	
	CK	Sugiyama et al., "Covalent Alkylation of DNA with Duocarmycin A. Identification of Abasic Site Structure," Tetrahedron Letters, Vol. 31, No. 49, Pages 7197-7200, Pergamon Press plc (1990)	
	CL	Sugiyama et al., "A Novel Guanine N3 Alkylation by Antitumor Antibiotic Duocarmycin A," Tetrahedron Letter, Vol. 34, No. 13, Pages 2179-2182, Pergamon Press Ltd. (1993)	
	CM	Boger et al., "An Improved Synthesis of 1,2,9,9a-Tetrahydrocyclopropa[c]benz[e]indol-4-one (CBI): A Simplified Analogue of the CC-1065 Alkylation Subunit," J. Org. Chem., Vol. 57, Pages 2873-2876, American Chemical Society (1992)	
	CN	Boger et al., "An Efficient Synthesis of 1,2,9,9a-Tetrahydrocyclopropa[c]benz[e]indol-4-one (CBI): An Enhanced and Simplified Analog of the CC-1065 and Duocarmycin Alkylation Subunits," J. Org. Chem., Vol. 60, Pages 1271-1275, American Chemical Society (1995)	
	CO	Tao et al., "Highly Cooperative DNA Dialkylation by the Homodimer of Imidazole-Pyrrole Diamide-CPI Conjugate with Vinyl Linker," J. Am. Chem. Soc., Vol. 122, Pages 1602-1608, American Chemical Society (2000)	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Examiner Signature		Date Considered	
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